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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/594,456	06/15/2000	Shawn D. Abbott	30074.27US11	8669

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EXAMINER

JACKSON, JENISE E

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/594,456

Applicant(s)

ABBOTT ET AL.

Examiner

Jenise E Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 11-15 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 4, 10 and 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-8, 11-15, 17-19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Benson (EP 0936530) in view of Gabrielle.

3. As per claim 1, Benson discloses a compact personal token (i.e. dongle, 1101) (see col. 24, lines 8-10), a USB-compliant interface releaseably coupleable to a host processing device operating under command of an operating system; a smartcard processor having a smartcard processor-compliant interface for communicating according to a smartcard input and output protocol, and interface processor (see col. 6, lines 38-45, 56-57, col. 7, lines 1-5), communicatively coupled to the USB-compliant interface and to smartcard processor-compliant interface, the interface processor implementing a translation module for interpreting USB-compliant messages into smartcard processor-compliant messages and for interpreting smartcard processor-compliant messages into USB-compliant messages (see col. 4, lines 4-23, col. 24, lines 8-16).

4. Benson does not disclose a USB-compliant interface; however, Gabrielle teaches a USB-compliant interface, such as a USB port. It would have been Obvious to one of ordinary skill in the art to include the USB-compliant interface of Gabrielle in the Benson system, the motivation to have a USB-compliant interface is that USB can transfer data quicker than a serial or parallel

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port, and is “hot swappable” plug-and-play, allowing consumers to alter the configuration of their computers without using ports specific to any one peripheral; up to 127 devices can be daisy-chained using USB ports, including parallel device that can be link to a USB port via a dongle device.

5. As per claim 2, Benson discloses the interface processor emulates a smartcard reader to the smartcard processor(see col. 3, lines 22-26, col. 4, lines 14-23, col. 6, lines 38-41).

6. As per claim 3, Benson discloses the host processing device includes a virtual smartcard reader in communication with the operating system(see col. 4, lines 14-23), the virtual smartcard reader for emulating a smartcard reader communicatively coupled to the host processing device(see col. 6, lines 39-44) and including a communication module for packaging messages for transmission to the personal token via the compliant interface according to a first protocol, the Examiner asserts that Benson inherently discloses this, because Benson discloses a virtual smart card reader that is a virtual hardware acting as a emulator that passes information to and from a virtual smart card(see col. 9, lines 38-41) and for unpackaging messages received from the personal token via the compliant interface according to the first protocol, and the interface processor translation module unpackages messages from the host processing device according to the first protocol(see col. 24, lines 8-16).

7. As per claims 5, 11, Benson inherently discloses wherein the virtual smartcard reader includes an answer-to-reset module for providing an ATR message to the operating system in response to a reset message, because Benson discloses a smart card(see col. 7, lines 49-51). The Examiner asserts that smartcards have answer-to-reset module.

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8. As per claims 6, 12, 17, wherein the virtual smartcard reader includes a reporting module for receiving and reporting the insertion of the personal token(see col. 24, lines 8-14), communicatively coupled to the host processor and the removal of the personal token as a removal of a smartcard from a smartcard reader(see col. 13, lines 41-53, col. 23, lines 35-37, col. 24, lines 18-22).

9. As per claims 7, 13, 18, Benson inherently discloses wherein the virtual smartcard reader includes a protocol selection module for receiving a protocol type selection command from the operating system and providing a PTS response message to the operating system, because Benson discloses that the virtual smart card can be inserted into different machines(see col. 3, lines 30-37). Therefore, the Examiner asserts that since Benson discloses that the virtual smart card can be inserted into different machines, that there is a protocol selection module.

10. As per claim 8, Benson discloses a processor, a memory, communicatively coupled to the processor, the memory storing processor operating commands implementing an operating system, and a virtual smartcard reader module stored in the memory and in communication with the operating system, for emulating at least one smartcard reader to the operating system(see col. 6, lines 39-41, col. 7, lines 33-45). First, a communication module is inherent in Benson, because information is passed to virtual smart card reader from the virtual smart card(see col. 6, lines 38-45). The Applicant is also urged to look further down column six. Benson discloses the virtual smart card stores protected information, such as digital signature. When the virtual smart card is inserted, the virtual smart card server downloads the protected information, thus there is a communication module in Benson(see col. 6, lines 48-58, col. 7, lines 1-5, col. 9, lines 38-41).

11. As per claim 14, rejected under limitations already addressed(see claim 1 and 3).

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12. As per claim 15, rejected under limitations already addressed(see claim 1 and 3).

13. As per claim 19, Benson discloses a virtual smartcard reader emulator system, a first smartcard reader emulator, implemented in a host computer for emulating smartcard reader operations to the host computer(see col. 3, lines 29-35); and a second smartcard reader emulator, implemented in a personal key, for emulating smartcard reader operations to a smartcard-interface compliant personal key processor(see col. 4, lines 14-23, col. 24, lines 8-16).

14. Claims 4, 10, and 16 are objected to as being rejected on base claims. Claims 4, 10, and 16 are allowed because, Benson does not disclose a bootup module for responding if a smartcard reader is coupled to the host processor. Benson discloses that if a dongle is coupled to the computer the smartcard program boots.

Response To Amendment

15. As per Applicant's remarks to office action dated 10/6/03, the Examiner has replied to Applicant's remarks see below:

16. First, the Applicant states that the reference Benson does not disclose a physical smartcard processor. The Examiner asserts that the Applicant has not claimed a physical smartcard processor. Therefore, the argument is moot.

17. Secondly, the Applicant states that the Benson reference that was used to reject claims in office action, does not send commands at all...it receives smartcard commands and executes them using a software emulation. Also, the Applicant states that Benson does not package or translate smartcard commands. Further, the Applicant states that Benson does not disclose a smartcard processor. The Examiner disagrees with the Applicant in regards to these remarks.

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Benson discloses a smartcard processor in a personal key(virtual smartcard) is enabled by use of an interface processor, because the interface processor includes a smartcard reader emulator, that functions to emulate those of a smartcard reader, thus projecting the image of a smartcard reader to the smartcard processor(see col. 6, lines 30-45). Benson also discloses that the virtual smartcard reader passes information to and from the virtual smartcard(see col. 6, lines 30-45). Therefore, the Examiner asserts that commands are sent and executed using a software emulation as done by Benson. Furthermore, as the reference of Gabrielle there is teaching to combine(see previous office action(pg. 2).

18. Thirdly, the Applicant states that Benson does not disclose a communication module, and it is not inherent in Benson. The Examiner disagrees with the Applicant. First, a communication module is inherent in Benson, because information is passed to virtual smart card reader from the virtual smart card(see col. 6, lines 38-45). The Applicant is also urged to look further down column six. Benson discloses the virtual smart card stores protected information, such as digital signature. When the virtual smart card is inserted, the virtual smart card server downloads the protected information, thus there is a communication module in Benson(see col. 6, lines 48-58, col. 7, lines 1-5, col. 9, lines 38-41).

19. Fourth, the Applicant states that a virtual smartcard reader includes a bootup module for responding to operating system bootup procedures with an indication that a smartcard reader is communicatively coupled to the host processor. The Examiner agrees with the Applicant, Benson does not discloses a bootup module for responding if a smartcard reader is coupled to the

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host processor. Benson discloses that if a dongle is coupled to the computer the smartcard program boots.

20. Fifth, the Applicant states that Benson does not disclose a virtual smartcard reader including a reporting module for receiving and reporting the insertion of the personal token and removal of the personal token as a removal of a smartcard. The Examiner disagrees. The virtual smart state is recorded in the virtual smart card server's database. When the virtual smart card is inserted in the virtual smart card reader, an insertion operation takes place, and when the virtual smart card is removed certain operations take place, but the states are recorded in the server(see col. 13, lines 28-49).

21. As per claims 7, 13, and 18, Benson does disclose that the virtual smart card can be inserted into different machines(see col. 6, lines 1-3).

22. As per claim 8, in regards to the communication module has already been addressed(see above).

FINAL ACTION

23. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenise E Jackson whose telephone number is (703) 306-0426. The examiner can normally be reached on M-Th (6:00 a.m. - 3:30 p.m.) alternate Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-0040 for regular communications and (703) 308-6306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



March 22, 2004


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100